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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/591,472	06/09/2000	Richard Robert Boland	Boland 8-2-15-2	2777

7590 09/30/2004  
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EXAMINER

ESCALANTE, OVIDIO

ART UNIT PAPER NUMBER

2645

DATE MAILED: 09/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

### Application No.

09/591,472

### Applicant(s)

BOLAND ET AL.

### Examiner

Ovidio Escalante

### Art Unit

2645

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 7, 8, 11-13, 17, 18, 21-23, 27, 28 and 31-42 is/are rejected.
- 7) ☒ Claim(s) 4-6, 9, 10, 14-16, 19, 20, 24-26, 29, 30 and 43 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

### **DETAILED ACTION**

1. This action is in response to applicant's amendment filed on June 21, 2004. **Claims 1-43** are now pending in the present application.

#### ***Continued Examination Under 37 CFR 1.114***

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on June 21, 2004 has been entered.

#### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claim 39 is rejected under 35 U.S.C. 102(e) as being anticipated by DePaola et al. US Patent 6,405,028.

***Regarding claim 39***, DePaola teaches a tandem parameter (TCAP call control type response message), the tandem parameter for use in a message transmitted from a database (LIDB database 41) to a network switch (tandem office 33), (col. 15, lines 45-53) the tandem parameter comprising:

Art Unit: 2645

a first predetermined value, (called party not a CPP subscriber), the first predetermined value designating that no tandeming is to be performed for an incoming call leg to the network switch, (col.15, lines 59-66); and

a second predetermined value, (called party is a CPP subscriber), the second predetermined value designating that tandeming is to be performed for the incoming call leg to the network switch, (col. 16, lines 6-14), whereby the network switch is directed to route the incoming call leg to an application node (external platform e.g. IP/ CPP node) and to receive the call leg from the application node when processing by the application node is completed, (col. 16, lines 14-27; col. 17, lines 22-35).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various

Art Unit: 2645

claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 1,7,11,17,21 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over DePaola et al. US Patent 6,405,028 in view of McHenry et al. US Patent 6,397,055.

***Regarding claims 1,11 and 21***, DePaola teaches a method, apparatus and system for message-based intelligent tandeming of an incoming call to an application node (external platform such as intelligent peripheral) in telecommunication systems, (fig. 1; col. 16, lines 6-27), the method, apparatus and system comprising:

(a) receiving an incoming call leg at a first node (tandem 33), the incoming call leg being directed to a called party directory number, (col. 15, lines 10-19);

(b) transmitting a first message to a database (LIDB 41) to determine call treatment instructions, (col. 15, lines 20-27);

(c) receiving a second message containing a tandem parameter, (col. 15, lines 45-53);

(d) when the tandem parameter does not indicate tandeming, routing the incoming call leg to the called party directory number, (col. 15, lines 59-67);

(e) when the tandem parameter does indicate tandeming, (col. 16, lines 6-12), obtaining a routing parameter (col. 15, line 54-col. 16, line 16);

Art Unit: 2645

(f) tandeming the incoming call leg to the application node (col. 16, lines 6-27), whereby when processing at the application node is complete the call leg is returned to the first node, (col. 17, lines 23-35).

While DePaola teaches of performing digit analysis on the called number, (col. 15, lines 35-44), DePaola does not specifically teach performing digit analysis of the called party directory number when the tandem parameter does indicate tandeming and processing the call based on the digit analysis of the called party number.

In the same field of endeavor, McHenry teaches of a CPP system in which the network will perform digit analysis of the called party directory number (col. 11, lines 52-62; col. 12, lines 1-23). When successful analysis is determined the call will be routed to an application node (col. 12, lines 24-51) and when unsuccessful analysis was determined then the call is routed to a default location, (col. 11, lines 58-62).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of DePaola by performing digit analysis on the called party directory number as taught by McHenry so that the network switch will be able to properly connect the call to the correct destination.

**Regarding claims 7,17,27**, DePaola teaches wherein the tandem parameter has a first predetermined value (called party is not a CPP subscriber) to indicate that the incoming call leg is not to be tandemed to the application node, (col. 15, lines 59-66), and wherein the tandem parameter has a second predetermined value (called party is a CPP subscriber) to indicate that the incoming call leg is to be tandemed to the application node, (col. 16, lines 6-14).

Art Unit: 2645

**Regarding claim 33**, DePaola, as applied to claim 21, teaches wherein the switching center is a mobile switching center, (fig. 1; col. 15, line 62-col. 16, line 5).

**Regarding claim 34**, DePaola, as applied to claim 21, teaches wherein the switching center is a wireline switching center, (fig. 1; col. 15, lines 9-27).

**Regarding claim 35**, DePaola, as applied to claim 21, teaches wherein the application node is a prepaid telecommunication service, (col. 15, lines 28-44).

**Regarding claim 36**, DePaola, as applied to claim 21, teaches wherein the application node is a calling party pays telecommunication service, (col.15, lines 28-44).

**Regarding claim 37**, DePaola, as applied to claim 21, teaches wherein the application node is a one number telecommunication service node which sequentially alerts telephones of a subscriber, (fig. 1; col. 17, lines 23-35; col. 20, lines 44-56).

**Regarding claim 38**, DePaola, as applied to claim 21, teaches wherein the switching center transmits and receives a plurality of messages, to and from the database, via a second switching center, (col. 15, lines 20-54).

9. Claims 2,12 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over DePaola in view of McHenry in view of McGrath et al. US Patent 6,628,772.

**Regarding claims 2,12 and 22**, DePaola in view of McHenry, as applied above, do not specifically teach transmitting a third message to the database, the third message indicating a tandeming failure.

In the same field of endeavor, McGrath teaches that if the call cannot be tandemed to a VRU a fail routine message is sent to the database, (col. 13, line 63-col. 14, line 7).

Art Unit: 2645

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of DePaola in view of McHenry by indicating a failure to the database as taught by McGrath so that subsequent call processing can be initiated.

10. Claims 3,8,13,23 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over DePaola in view of McHenry in view of McGrath and further in view of Lewis US Patent 6,175,574.

*Regarding claims 3,8,13,23 and 28*, while DePaola, McHenry and McGrath, as applied above, teaches of indicating a tandeming failure and of indicating a tandem parameter, they do not specifically teach of the a predetermined value in an ANSI-compatible redirection reason being indicated or wherein the tandem parameter is a predesignated value of a single-octet field or a plurality of octets within an ANSI-compatible calling features indicator parameter.

However, the Examiner notes that it was well known in the art that signaling messages from the database to the network switch are arranged in the form of bits, i.e. octets that indicate to the switch information for processing the call. It would have been obvious that DePaola, McHenry and McGrath would receive the tandem parameters as encoded octets so that the network switch can interpret the received message.

In the same field of endeavor, Lewis teaches that it was well known in the art to indicate to a switch a value which is encoded in a single-octet field or a plurality of octets within an ANSI-compatible calling features indicator parameter, (col. 13, line 37-col. 14, line 30). Lewis teaches that the octets comprise of information regarding where to route the call, incoming party ID and called party ID, (fig. 5; fig. 8). The encoding of Lewis is within an ANSI-compatible calling feature since Lewis uses SS7 messages.



Art Unit: 2645

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the predetermined value of DePaola, McHenry and McGrath to include an ANSI compatible parameter arranged as octet fields as taught by Lewis so that the network switch can properly interpret the received message from the database for call routing instructions.

11. Claims 31 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over DePaola in view of McHenry in view of Hentilä et al. US Patent 6,219,551.

*Regarding claims 31 and 32*, while DePaola in view of McHenry teaches of using databases and integrating wireline and wireless network, DePaola in view of McHenry do not specifically teach of wherein the database is a home location register or a visitor location register.

In the same field of endeavor, Hentilä teaches that it was well known in the art to have a mobile switching center which contacts a HLR/VLR database to locate a mobile subscribers profile, (col. 3, lines 51-col. 4, line 3). Hentilä also uses the HLR/VLR database for call routing information.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of DePaola and McHenry by including an HLR/VLR as taught by Hentilä so that the mobile switching centers can determine call routing information for a mobile subscriber.

Art Unit: 2645

12. Claims 40-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over DePaola in view of Lewis.

*Regarding claims 40-42,* While DePaola teaches of receiving the tandem parameter and of using SS7 signaling, DePaola does not specifically teach of wherein the parameter is encoded as an octet.

However, the Examiner notes that it was well known in the art that signaling messages from the database to the network switch are arranged in the form of bits, i.e. octets that indicate to the switch information for processing the call. It would have been obvious that DePaola would receive the tandem parameters as encoded octets so that the network switch can interpret the received message.

Nonetheless, Lewis teaches that it was well known in the art to receive signaling message and that the signaling messages are encoded as single or a plurality of octets, (col. 13, line 37- col.14, line 30). Lewis teaches that the octets comprise of information regarding where to route the call, incoming party ID and called party ID, (figs. 5; fig. 8). The encoding of Lewis is within an ANSI-compatible calling feature since Lewis uses SS7 messages.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the predetermined value of DePaola to include an ANSI compatible parameter arranged as octet fields as taught by Lewis so that the network switch can properly interpret the received message from the database for call routing instructions.

Art Unit: 2645

***Allowable Subject Matter***

13. Claims 4-6,9,10,14-16,19,20,24-26,29,30 and 43 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

14. Applicant's arguments with respect to claims 1-43 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

15. Any response to this action should be mailed to:

Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

or faxed to:

(703) 872-9306, (for formal communications intended for entry)

Or:

(703) 872-9306, (for informal or draft communications, please label  
"PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal  
Drive, Arlington, VA, Sixth Floor (Receptionist).

Art Unit: 2645

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ovidio Escalante whose telephone number is 703-308-6262. The examiner can normally be reached on M-F (6:30AM - 5:00PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan S Tsang can be reached on 703-305-4895. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ovidio Escalante  
Examiner  
Group 2645  
September 27, 2004

**OVIDIO ESCALANTE**  
**PATENT EXAMINER**

*Ovidio Escalante*